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Effects of Three Organizational Policies on Individuals' Attitudes About Drug Testing

Alan Walker

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EFFECTS OF THREE ORGANIZATIONAL POLICIES ON INDIVIDUALS'
ATTITUDES ABOUT DRUG TESTING

A Thesis Presented to
the Faculty of the Department of Psychology
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Alan G. Walker
December 1990

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EFFECTS OF THREE ORGANIZATIONAL POLICIES ON INDIVIDUALS'
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8/24/90
(Date)

Director of Thesis

John O'Connor

Sam M. Finkel

Approved 9/13/90
(Date)

Elmer Gray
Dean of Graduate College

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EFFECTS OF THREE ORGANIZATIONAL POLICIES ON INDIVIDUALS'
ATTITUDES ABOUT DRUG TESTING

Alan G. Walker

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Directed by: J. R. Bruni, J. O'Connor, and S. McFarland

Department of Psychology

Western Kentucky University

The consensus of recent literature appears to be that drug testing is both legal and valid. However, a testing program can meet legal and technical criteria and still fail to meet organizational objectives because one vital component has been left out - employees' attitudes. The present study uses data from 148 college juniors and seniors to assess the effects of three hypothetical drug testing policies: (a) consequences of detected drug use (termination vs. rehabilitation), (b) timing of the program (expected interval vs. random interval vs. reasonable cause), and (c) business purpose (weak vs. strong) on attitudes toward drug testing. It was hypothesized that attitudes would be most favorable when testing was for reasonable cause, with a strong business purpose, and detected use resulted in required rehabilitation. Results revealed a significant interaction between business purpose and consequence implying that organizations may reduce negative reactions to drug testing by first having a clear need for drug testing (e.g. in response to an increasing accident rate) and seeking to rehabilitate employees who are detected of using drugs rather than simply terminating them.

Introduction

Employee drug testing has emerged as a hotly debated topic in the personnel literature. Part of the reason for the concern are some rather alarming statistics. For example, it is estimated that about half of work place injuries and about 40% of work place deaths are attributed to drug or alcohol use (McDaniel, 1988). Furthermore, it is estimated that about 2/3 of the people entering the work force have used illegal drugs (McDaniel, 1988, as quoted by Tyson & Vaughn, 1987) and that three to seven percent of all employees use illicit drugs on a daily basis (Colosi, 1989, as quoted by Sisco, 1987). Finally, it is estimated that about 5-10% of all employees have an alcohol problem (Colosi, 1989, as quoted by Sisco, 1987).

Review of the Literature: The Legal Literature

Recent literature on the drug testing debate can be classified into one of three areas; legal, technical, and attitudinal. The legal literature is found mostly in law journals, personnel journals, and labor relations journals, and usually is written by legal professionals (e.g. Angarola (1985); Bible (1987); Colosi (1989). Of primary concern here is whether or not urinalysis entails a "search" under the guidelines of the Fourth Amendment and exactly what it

is that makes such a search "reasonable."

While these issues are far from being totally resolved by the courts, a clearer picture of the status of urinalysis under the Fourth Amendment is beginning to emerge (Bible, 1987). First, the Supreme Court has ruled that a compulsory urinalysis of a government employee, in the context of his/her employment is considered to be a search under the Fourth Amendment (Simpson, 1989). Furthermore, "it seems to be inescapable that drug testing by urinalysis is forever exempt from a warrant requirement" (Simpson, 1989, p. 562).

The Technical Literature

The second area or category that the drug testing literature falls into is that of the usefulness, effectiveness, and validity of drug testing programs. For example, Gomez-Mejia and Balkin (1987) attempted to ascertain which factors associated with drug-testing programs play a major role in their effectiveness. Results of this study revealed that the most effective drug testing programs are supported by ancillary programs such as employee assistance programs and supervisory training. In addition, organizational drug testing programs which were most effective used drug testing only for targeted groups of employees and focused on rehabilitation for those who test positive.

Other researchers such as McDaniel (1988), have

examined the criterion-related validity of pre-employment drug-use information. Specifically, McDaniel (1988) formed a nine-item drug-use questionnaire and included it in the military's Educational and Biographical Information Survey for 10,188 subjects entering military service. The nine items questioned new recruits about the age at which they first used drugs, whether they had any drug-related arrests, and the frequency with which they had used marijuana, cocaine, stimulants, depressants, and other drugs. McDaniel (1988) used an employment suitability measure operationalized as discharge from military service for reasons classified as "failure to meet minimum behavioral or performance criteria" as his criterion measure (McDaniel, 1988, p. 719).

Results revealed that, in general, the younger one begins to use drugs and the more one uses drugs, the greater is the probability of being unsuitable for employment. In addition, those who had never been arrested for drug offenses or had never used drugs at all before were less likely to be discharged from service.

Results also revealed that the observed correlations between the nine drug-use items and the suitability criterion were very low ($-.05$ to $.08$). In other words, the drug-use items were found to have very low predictive validity. McDaniel (1988) points out, however, that the low validity of the drug-use questionnaire items may be due to

the low base rate for drug usage. McDaniel (1988) states that the low base rate for these drugs makes their operational validity of limited value. McDaniel (1988) concludes that employers should never rely solely on drug-use measures as predictors of employment suitability due to their low operational validity.

Normand (1989) also states that few studies have investigated the relationship between preemployment drug-use information and subsequent job performance. Unlike McDaniel (1988) who used self-report data to collect preemployment drug use information, however, Normand (1989) made use of a preemployment urinalysis test which was part of an existing preemployment medical examination. Specifically, drug test results were obtained from 5,465 job applicants for positions with the Postal Service.

Results of the Normand (1989) study revealed that the overall positive rate of the new hires was 8.8%. In addition, those who tested positive were found to have an absence rate 41% higher than those who tested negative. Finally, employees who tested positive were approximately 1.5 times more likely to be involuntarily separated than employees who tested negative.

Normand (1989) concludes that preemployment drug testing can be a viable contributor to the prediction of turnover and absenteeism. Furthermore, he reports that the cost savings for the U.S. Postal Service in terms of

turnover and productivity is figured to be \$17,000,000 after three years.

In summary, the first category of drug testing literature, the legal literature, informs us that drug testing is legal. The second general area of the drug testing literature concerning the usefulness, effectiveness, and validity of drug testing informs us that these tests can be very accurate (near zero error rate with high-quality tests and second confirmatory tests) and useful for both predicting worker suitability and saving our organizations from the high cost of absenteeism and turnover.

The Attitudinal Literature

However, a drug testing program may be legal, effective, and valid, but if employees have a strong negative reaction to the program it could result in less than optimal overall utility. Unfortunately, there exists a dearth of research which examines this vital component to the overall drug testing program.

One of the few studies that has examined the effects of organizational drug testing on employee attitudes is Crant and Bateman (1990). These researchers were specifically interested in examining the effect of the presence of a drug testing program and perceived need for the program (as operationalized through accident rates, absenteeism, and theft) on potential job applicants' attitudes toward a

company and intention to apply to that company.

Crant and Bateman (1990) had 163 undergraduate students read one of four different scenarios each containing a description of one company. These scenarios included information about the need of the program (high or low) and whether a drug testing program was absent or present.

Results of the Crant and Bateman (1990) study revealed that potential job applicants had more positive attitudes and had more positive intentions to apply to companies that did not test for drug use than for those that did test. Furthermore, it was found that potential applicants held more positive attitudes and more positive intentions to apply to companies that did not need a drug testing program (as indicated by absenteeism, accident and theft problems) than towards companies that did need such a program.

The results of the Crant and Bateman (1990) study suggest that organizations should consider the effects of drug testing programs on potential job applicants. It should also be pointed out that although an organization's drug testing program may be legal and valid, many potential employees may be "turned off" by the mere presence of a drug testing program. Furthermore, many of these employees may very well turn out to be non-drug-users who would otherwise have made suitable employees. Crant and Bateman (1990) conclude that future research should assess employee reactions to different program characteristics, and that

perhaps controlled experiments could vary characteristics of organizational drug testing program policies in order to assess reactions to different types of programs.

Stone and Kotch (1989) have designed such a study, pointing out that employees' attitudes and reactions to drug testing may have important implications for employees' effort levels, grievance rates, and labor-management relations in organizations. Stone and Kotch (1989) posit that a better understanding of employees' attitudes toward drug testing policies may place employers in a better position to design testing programs that consider both the needs of the organization to be drug free and employees' right to privacy.

Stone and Kotch (1989) considered two factors that might influence individuals' attitudes toward drug testing; advance notice and rehabilitation focus. The first factor concerned whether or not advance notice of the drug testing was given. Stone and Kotch (1989) hypothesized that drug testing without advance notice would be much more likely to elicit negative reactions than would testing with prior notice.

Stone and Kotch (1989) based this hypothesis on theoretical work on information privacy conducted by Westin (1967) and Margulis (1977). These researchers maintain that individuals value the freedom or ability to have control over information concerning themselves. This concept is

defined as information privacy by Westin (1967) and Margulis (1977). Stone and Kotch (1989) posit that unannounced drug testing would have a greater potential to evoke negative reactions because it threatens the individual's freedom or ability to have control over information concerning whether he has drugs in his system or not.

Stone and Kotch (1989) find additional support for their first hypothesis from two additional sources. First, according to Brehm's (1966) theory of psychological reactance, a threat to or elimination of the freedom to perform certain behaviors will arouse the individual psychologically. This arousal or reactance will then be aimed at restoring the threatened or eliminated behavior. In other words, the simple use of force, in this case forcing a person to undergo a drug test, can backfire in its attempt to secure compliance and attitude change (Worchel, Cooper, and Goethals, 1938). Second, Fusilier and Hoyer (1980) and Tolchinsky, McCuddy, Adams, Ganster, Woodman, & Fromkin (1981) in their research on information privacy have found "that individuals were less likely to perceive that their privacy had been invaded when personal information was disclosed with their permission than when no permission was granted" (Stone & Kotch, p.519).

The second factor that Stone and Kotch (1989) investigated regarding individual's attitudes towards drug testing was that of the consequences of detected drug use.

Specifically, they hypothesized that "individuals attitudes toward drug testing will be more negative when detected drug use results in termination than when detection results in rehabilitation" (Stone & Kotch, 1989, p.519). Stone and Kotch base this argument on the social psychological theory and research on social power conducted by French and Raven (1959).

French and Raven (1959) have identified five bases from which individuals gain power, one of which is coercive power. Coercive power involves the potential to deliver threats and punishment to force another person to change his or her behavior. However, as Stone and Kotch (1989) point out, the use of coercive power may produce a dislike or resentment toward those who use it and may even lead to withdrawal or retaliation. Therefore this research leads Stone and Kotch (1989) to believe that termination will be equated with coercive power for individuals and thus to a more negative attitude toward drug testing.

In order to test their two hypotheses, Stone and Kotch (1989) made use of a sample of 73 blue-collar employees of a midwestern manufacturing firm. They employed a 2 (advance notice vs. no advance notice) x 2 (termination vs. rehabilitation) design. They manipulated the independent variables by having subjects read one of 4 (2 x 2) possible scenarios depicting a hypothetical drug testing program. The first paragraph of each scenario was the same for all

subjects. It described a hypothetical organization that uses a seven-step process to manufacture television sets. The actual manipulations were made in the second paragraph all of which started with the following sentence "The company recently began a drug testing program" (Stone & Kotch, 1989, p. 520). In the remainder of this second paragraph the independent variables were manipulated as follows:

In the advance notice not provided condition, the scenario indicates that the firm's personnel manager picks drug test dates and individuals to be tested on a random basis... In the advance notice provided condition, the scenario indicates that the firm's personnel manager picks drug test dates and testees on a random basis; however, the policy specified that individuals are informed in advance of their specific drug test date and time (p. 520).

In terms of the consequences of detected drug use the manipulation involved modifying the hypothetical actions taken when drug use was detected.

In the termination condition, the scenario specified that if the drug test results were positive, the employee would be fired immediately. In the rehabilitation condition, the scenario indicated that if drug test results were positive the employee would be required to attend a rehabilitation program (p.520).

It should also be noted that every scenario specifically specified that confirmatory tests would be run on all initial positive drug test results.

After reading the scenario, subjects then completed an instrument designed to measure their attitudes about the drug testing program. The instrument contained eight items each having a 7-point (strongly disagree to strongly agree) response format. A Principal Components analysis revealed that all eight items loaded on a single component, therefore responses to the items were summed to form a composite score of attitudes toward drug testing. The coefficient alpha reliability estimate for this measure was .90.

Using multiple regression analysis the composite score of the attitude measure was regressed on the two independent variables which consisted of advance notice of program implementation and consequence of detected drug use. Results indicated that both advance notice and consequence of detected drug use had a significant main effect on attitudes toward drug testing.

The results of this study have several important implications for the design of organizational drug testing programs. First, employers should inform employees well in advance of the testing. Second, employers should make use of ancillary, rehabilitative programs such as Employee Assistance Programs rather than simply terminating an employee detected of drug use.

The Stone and Kotch Examination of Random Testing

Stone and Kotch (1989) assert that "random testing is often one of the most controversial methods for conducting drug tests." In addition, they identify two specific problems with its practice. First, they state that it is "arbitrary and is not based on reasonable cause" (p. 519). Second, in a completely random testing program "employees are not given advance notice of the drug test date" (p. 519). That is, in a random testing program a random subset of employees are selected to be tested on a randomly chosen date and time.

However, the specific manipulation of the independent variable in their study involved only manipulating advance notice vs. no advance notice. In other words, Stone and Kotch (1989) only investigated the second problem that they identify concerning random testing, leaving the first (that it is arbitrary and not based on reasonable cause) unmentioned. In both conditions the scenario informs the reader that "the firm's personnel manager picks drug test dates and individuals to be tested on a random basis" (p. 520). In other words, in both conditions the reader is informed that the choice of which subjects are tested is random. What is actually manipulated is whether advance notice of the individual's specific drug test date and time is given or not. However in both conditions the testing remains random. Therefore, there has not been a direct

investigation of whether choosing those who will be tested based on reasonable cause results in less negative reactions than does choosing subjects at random. We merely know that no advance notice is more likely to evoke negative reactions than when advance notice is given.

Testing Options Available

Lorber and Kirk (1987) state that, in general, there exists three timing options from which employers may choose to test their employees. The first timing option available is that of expected intervals. For example, employers could announce that they are going to test employees twice a year at pre-announced dates roughly six months apart. As Lorber and Kirk (1987) point out, this option offers the employee the virtue of no surprises, and thus may be less objectionable. It should be pointed out that this option gives advance notice to employees like the Stone and Kotch (1989) manipulation, but, unlike the Stone and Kotch manipulation, the selection of employees is not random. That is, the program is in place for an entire class of employees, not randomly selected employees.

A second option identified by Lorber and Kirk (1987) is that of random intervals. Under this option employees are exposed to the possibility of a surprise test at any time. That is, a randomly selected subgroup of employees would be selected to be tested at a randomly selected date and time.

It should be noted that this option is equivalent to Stone and Kotch's (1989) "no advance notice condition."

One problem identified by Lorber and Kirk (1987) with this method is that there is no satisfactory answer to employees' question "Why are you testing me?." Because of this Lorber and Kirk (1987) believe, as does Stone and Kotch (1989), that random testing will be the most offensive sort of program that can be devised.

The third timing option available to employers as identified by Lorber and Kirk (1987) is that of testing based on reasonable cause. This option was alluded to by Stone and Kotch (1989), but a direct investigation on subsequent employee attitudes was not made. Under this option employees are only tested when supervisors have some reason to suspect alcohol or drug abuse. According to Lorber and Kirk:

Reasons for suspicion may be divided into two general categories. First, there are familiar physical and behavioral signs and symptoms of substance abuse - slurred speech, lack of balance, dilated pupils, and so on. A second category of reasons might be labeled 'suspicious workplace events' - industrial accidents, unexplained absences, a rapid decline in performance and the like (p. 14).

It should be noted that a program based solely on reasonable cause may mean that most employees are never

tested, since there may be no reason to suspect that they have been abusing alcohol or drugs. This may result in less objections by employees and will mean the organization does not have to spend money on testing employees needlessly. In addition, Lorber and Kirk (1987) identify several further advantages of testing based on reasonable cause. First, there will always be an answer to an employees' question "Why am I being tested?." Second, testing based on reasonable cause will help employees to not view the testing program as some kind of "witch hunt" because some observable cause existed prior to the test. In other words, the testing is directly related to whether an employee is fit for duty.

Perhaps the greatest virtue of testing based solely on reasonable cause involves the interpretation of positive results. Suppose an employee tests positive for marijuana use and a second test confirms the results of the first test. Suppose further that the accuracy of the test is such that it leaves a zero percent chance of a false positive. Now what? As Lorber and Kirk (1987) point out, the practical meaning of that positive result will not be clear. Why? Because every laboratory method of drug testing results in facts about body chemistry, not behavior. In other words, the question still remains whether this employee's marijuana use occurred at work or otherwise had any effect whatsoever on his performance at work. Just

because an employee's drug test turns out to be positive does not mean he was using drugs at work or whether the drug use resulted in deviations from normal work performance.

An ethical dilemma here is whether or not an employer should punish an employee because he used drugs as a recreational activity away from the work site on his own time and such drug use had no observable effect on his work performance. Suppose for example that an employee used marijuana on a recent three-week vacation, then upon returning to work discovers he has to submit to a urine test. Obviously, if the employee used marijuana in the middle of his vacation the drug had no effect on his work performance on this day. Unfortunately for this employee, marijuana residue can remain in the body for weeks or even months to come (Lorber & Kirk, 1987) resulting in a positive drug test result. Therefore, this unfortunate employee would have to suffer the consequences of a positive drug test result even though it has nothing whatsoever to do with his job performance.

Arguing from the same theoretical underpinnings as Stone and Kotch (1989), it would seem that testing based solely on reasonable cause would not evoke as much psychological reactance as would a random testing procedure. That is, it would seem that an individual's sense of freedom should not be perceived as being as threatened when he is being tested because he possesses behavioral signs of drug

use as when he is being tested "by chance." Further, regarding the research conducted by Westin (1967) and Margulis (1977) concerning information privacy, it would seem that employees would enjoy the maximum amount of ability to control information about their use of drugs if they were tested only for reasonable cause. In this way, he would be able to control the release of information concerning his body chemistry by simply not being under the influence of drugs at work.

Based on the above arguments, it is hypothesized that testing based on reasonable cause will result in the most favorable employee attitudes about drug testing, followed by expected interval testing and then random testing. However, while drug testing based solely on reasonable cause does have advantages, and it is expected that these advantages will result in improved employee attitudes, it also places an additional burden on managers. That burden is that they must be trained to distinguish the physical and behavioral signs and symptoms of substance abuse. Since the acceptability, efficiency, and fairness of the program hinges on their observations, it is imperative that the observations be accurate, objective, and fair. Stated another way, reasonable cause testing and supervisory training must go hand in hand.

The Importance of a Business Related Purpose

Lorber and Kirk (1987) identify one further variable concerning drug testing. This variable is whether or not an organizational testing program is based on a clear business purpose or goal. As Lorber and Kirk (1987) point out, many employers are implementing drug testing programs simply to join in on the parade. They may have not given serious consideration to why their organization has (or is going to implement) a drug testing program or to what goal they are trying to achieve.

If an organization can communicate to its employees a well-defined business purpose for implementing a drug testing program, this should add to employees' positive attitudes about the program. That is, it would seem that if an organization implemented a drug testing program because there was a dramatic increase in accident rates on the third shift in the cutting department with the supervisor reporting he suspects drug use is a contributory cause, that this would result in more positive attitudes than if the organization implemented a drug testing program merely due to a sense of public duty. In the latter case, there may be no employees using drugs anyway. This may result in employees feeling like the new drug testing program is a "witch hunt" or a pretext for certain personnel actions. In terms of the organization, it would mean spending money to solve a non-existent problem and in the process the

organization may be creating negative employee attitudes.

In the present study it is therefore hypothesized that attitudes toward drug testing will be more positive when there is a strong business purpose condition (accidents are occurring) than when there is a weak business related purpose (program implemented due to increased societal awareness of drug problems).

Overview

The purpose of the present research was to further study individuals' attitudes towards organizational drug testing policies and practices. It is both a replication and extension of the Stone and Kotch (1989) study. The present study sought to replicate the findings of Stone and Kotch (1989) concerning the rehabilitative vs. termination outcome for detected drug use. This variable was examined exactly as Stone and Kotch (1989) examined it. However, there were major departures from the Stone and Kotch (1989) study because new variables were investigated while others were modified. In brief, by using a 2x3x2 experimental design the present study examined the effects of (a) consequences of detected drug use (termination vs. rehabilitation), (b) timing of the program (expected interval vs. random interval vs. reasonable cause), and (c) business purpose (weak vs. strong) on attitudes toward drug testing in a hypothetical firm.

Method

Procedure

The experiment was conducted for most students during their regularly-scheduled class meeting times. In addition, other subjects were informed of a reserved classroom and dates and times that the experiment took place. Students could thus sign-up for the experiment on a given date and time at their convenience. Most students were given extra credit for participating in the research.

Each student was (a) given a consent form indicating the purpose and procedures used in the study (see appendix A), (b) asked to review one of 12 organizational scenarios depicting a drug testing policy used by a hypothetical manufacturing firm (see appendix B), (c) asked to complete a questionnaire designed to assess attitudes toward the hypothetical drug testing policy (see appendix C), (d) asked to complete a questionnaire containing demographic items (see appendix D) and manipulation checks (see appendix E), and (e) thanked for their participation and debriefed.

Subjects

A total of 148 college juniors (47%) and seniors (53%) participated in the study. Fifty-three students were males and 95 were females.

Manipulations

Consequence of detected drug use

The consequences of detected drug use (termination vs. rehabilitation) were examined exactly as Stone and Kotch (1989) examined them. Subjects first read the same scenario depicting a seven-step process to manufacture television sets. The only difference between the present scenario and that of Stone and Kotch (1989) was that sentences stating that certain tasks involved in the assembly process are potentially dangerous were deleted. This was done so as not to confound danger in the tasks of the job with strong business purpose where subjects were informed that accidents were occurring (the reader is referred to Appendix B for the exact wording).

Likewise, as in the Stone and Kotch (1989) study, the manipulations were made in the second paragraph of the scenario all of which began with the sentence "The company recently began a drug testing program." Specifically, in the second paragraph subjects were informed that detected drug use would result in either immediate termination or mandatory attendance at a rehabilitation program (the reader is referred to Appendix B for exact wording).

Hypothesis 1. It is hypothesized that the rehabilitative condition will lead to more favorable attitudes about the organization's drug testing policy than the termination condition.

Timing of the program

Stone and Kotch (1989) investigated the effects of testing only for reasonable cause in an indirect way by only manipulating whether an employee received advance notice or not of his drug test time and date. The present study made a more direct examination of the effects of testing solely for reasonable cause by making use of Lorber and Kirk's (1987) three timing options. Specifically, there were three conditions for this variable: expected interval, random interval, and reasonable cause.

In the expected interval condition, the scenario indicated that the drug testing will be administered once a month on the first morning of work after each payday. In the random interval condition, the scenario indicated that the firm's personnel manager will pick drug test dates and testees on a random basis. Finally, in the reasonable cause condition, the scenario indicated that employees shall only be tested based on observations indicating typical behavioral symptoms of drug usage by trained supervisors (slurred speech, lack of balance, dilated pupils, accidents, unexplained absences, rapid decline in performance, etc.,).

It should be noted that three months advance notice was given for each of these conditions and subjects were informed that this period of time would allow them enough time to "cleanse" their systems of any drug residues. It should also be noted that while Lorber and Kirk (1987)

discuss these three timing options for both drug and alcohol testing, in the present experiment only drug testing was addressed. This was to avoid confounding the two types of testing and their possible separate effects on employee attitudes concerning testing for reasonable cause only. (The reader is again referred to appendix B for exact wordings on the different conditions).

It is believed that this design allows a more direct examination of whether testing based solely on reasonable cause leads to more positive attitudes toward drug testing. In other words, by making use of this design it can be more soundly concluded that testing based on reasonable cause is having the effect on employee attitudes and not mere advance notice.

Hypothesis 2. It will be hypothesized that reasonable cause will lead to the most positive attitudes followed by expected interval and then random interval.

Business related purpose

Another major departure from the Stone and Kotch (1989) study concerns whether the organization has a business related purpose or not for the drug testing. This variable had two conditions. In the weak business purpose condition, the scenario indicated that the organization has implemented the drug testing program as a result of recent societal awareness and concern over drug usage in the United States.

As a result, the firm's personnel manager felt a sense of public duty to take action. In the strong business related purpose condition, the scenario indicated that the firm's personnel manager has become aware of and concerned about a rapid increase in the number of accidents within the organization. Upon investigation he learns that the accidents are occurring in the picture tube department on the third shift. Interviews with supervisors in this department reveal concern that the accidents may be due, in part, to employees being under the influence of drugs (see Appendix B for exact wording).

It is believed that attitudes towards the drug testing will be more positive in the strong business related purpose condition than in the weak business related purpose condition. In other words, it is believed that employees will not feel their freedom is as threatened if the organization can communicate to them a clear, rational purpose for implementing a program as opposed to just implementing a program because "everyone" is doing it, or implementing a program based on a sense of public duty to do so.

Hypothesis 3. It is hypothesized that attitudes toward the drug testing will be more positive in the strong business related purpose condition than in the weak business related purpose condition.

The present study therefore made use of a 2

(termination vs. rehabilitation) x 3 (expected interval vs. random interval vs. reasonable cause) x 2 (strong vs. weak business related purpose) between subjects experimental design. It should be noted that the present study required 12 versions of the scenario (2 x 3 x 2) while the Stone and Kotch (1989) study only required 4 (2 x 2). The reader is referred to Appendix B which contains three of the 12 versions. These three versions contain all 12 of the possible conditions.

Measures

One of this study's dependent variables consisted of the exact eight-item instrument used by Stone and Kotch (1989) to measure employee attitudes (see first 8 items in Appendix C). In addition, several other experimental items were included in the attitude questionnaire to measure other dimensions that may prove useful for measuring employee attitudes about organizational drug testing (see items 9 - 30 in Appendix C).

The first such dimension consisted of an adapted five-item scale developed by Fusilier and Hoyer (1980) which measured the degree to which individuals perceived that their privacy had been invaded (e.g. Item 15 - It is necessary for the organization to conduct the drug testing described in this situation; see also items 5, 23, 16, 6). This dimension was included because it can reasonably be

expected that employees may feel that a specific drug testing program invades his/her privacy.

In addition, as mentioned by Stone and Kotch (1989), it can be reasoned that employees can logically be expected to make certain behavioral responses to drug testing. Therefore, a second dimension included items designed to measure reasonable expectations of how employees might behaviorally respond to drug testing (e.g. Item 17 - I would object to this drug testing program by filing a formal complaint; see also items 18, 19, 20).

Third, as also mentioned by Stone and Kotch (1989) drug testing may be expected to have effects on management-labor relations. The third dimension therefore consisted of a measure of how the drug testing would be perceived to impact interpersonal relations between management and labor (e.g. Item 21 - This drug testing program would have a definite effect on my future cooperation with upper-level management; see also items 12, 13, 14, 22, 28, 29).

Fourth, drug testing can logically be expected to have effects on employees' personal feelings. Subsequently, the fourth dimension consisted of a measure of how drug testing might effect employees' personal feelings (e.g. Item 26 - This drug testing program would humiliate me; see also items 24, 25).

Other items that were included in the questionnaire sought to measure how effective employees believe the drug

testing program would be (e.g. Item 27 - This drug testing program would result in a safer work environment; Item 30 - I believe that this particular drug testing program would be effective in discouraging drug use on the job). Still other items were designed to measure perceived fairness of the program. These items include the first eight items taken from Stone and Kotch's study as well as items 9, 10, 11.

Stone & Kotch Fairness Scale

Like in the Stone and Kotch (1989) study, a principal components factor analysis was performed on the eight-item attitude measure. This was undertaken to investigate whether all eight items had factor weights greater than .60 on a single component as in the original Stone and Kotch (1989) study. As can be seen from Table 1 all eight items had factor weights greater than .78 on one single component. This component accounted for 66.2% of the variance in the scores (as compared to 61.4% in the original Stone and Kotch, 1989 study).

Table 1

Factor Analysis Results for the
Stone and Kotch Measure

	<u>Factor 1</u>	*	<u>Factor</u>	<u>Eigenvalue</u>	<u>% of Var</u>
Item 1	.86	*	1	5.29	66.2%
Item 2	.84	*			
Item 3	.78	*			
Item 4	.82	*			
Item 5	.78	*			
Item 6	.82	*			
Item 7	.80	*			
Item 8	.80	*			

Prior to data collection it was decided that only those components with eigenvalues greater than one would be considered as final factors. Only one component met this criteria. This was interpreted as further evidence of a single underlying component. Finally, a scree test clearly revealed a one component solution. Responses to the items were thus summed to form the first of the study's two dependent variables. The eight items comprising this measure were interpreted to all be dealing with perceived fairness of the various drug testing programs. This measure or dependent variable will therefore be referred to as the Stone and Kotch fairness scale.

Also like the Stone and Kotch (1989) study, the estimate of the reliability of the instrument was investigated via a coefficient alpha (Cronbach, 1951). Stone and Kotch (1989) found the reliability of the instrument to be .90. As can be seen from Table 2, in the

Table 2

Reliability of Measures

<u>Measure</u>	<u>Alpha</u>
Stone & Kotch Fairness Scale	.93
Management-Labor Relations Scale	.80
Expanded Measure	.92

present study, the reliability was computed to be .93.

Therefore, it can be concluded that the psychometric properties of the Stone and Kotch (1989) measure using 73 blue-collar workers were in fact replicated for this sample of 148 college juniors and seniors. That is, one single underlying component was again found which accounted for over 60% of the variance in the scores. Furthermore, the reliabilities in both studies were found to be quite adequate (.90 and .93).

Management-Labor Relations Scale

The additional 22 experimental items were also factor analyzed via a principle components analysis with varimax rotation. The analysis resulted in four underlying components in the 22 items. However, as Table 3 shows, the first component had an eigenvalue of 10.44 and accounted for 47.5% of the variance. The eigenvalue for the second component dropped to 1.52 and only explained 6.9% of the

Table 3

Factor Analysis Results for the 22 Experimental Items

<u>Factor</u>	<u>Eigenvalue</u>	<u>% of Var</u>	<u>Cum %</u>
1	10.44	47.5%	47.5%
2	1.52	6.9%	54.4%
3	1.30	5.9%	60.3%
4	1.01	4.6%	64.9%

variance. Therefore, it was determined that the variance on the 22 items was primarily accounted for by one factor.

Table 4 presents the four items which were found to load ($< .40$) on this first component. These four items were interpreted to all be dealing with management-labor relations. Therefore, these four items comprised a second scale which formed the study's second dependent variable. This second scale can be seen to be measuring subjects' perceptions of how the various drug testing programs might effect management-labor relations.

Table 4

Items Loading Greater Than .40 on First Component

-
- Item 13: I believe this drug testing program is just a way to legitimize supervisor/manager personal biases regarding personnel decisions (like promotions, transfers, layoffs, firings, etc.)
- Item 14: I believe this drug testing program is just a way to discriminate against minorities in making personnel decisions (like promotions, transfers, layoffs, etc.)
- Item 21: This drug testing program would have a definite effect on my future cooperation with upperlevel management
- Item 22: I would object to this drug testing program by putting less effort into performing my job
-

When these four items are added to the eight-item Stone and Kotch (1989) measure (forming a 12-item measure) and factor analyzed via principle components with varimax rotation two distinct components clearly emerged. As Table 5 shows, the eight items comprising the Stone and Kotch fairness scale load at least .78 on the first component while the four items comprising the management-labor relations scale load at least .71 on the second component. It should be pointed out that even though the eigenvalue for the second component in Table 5 drops to 1.48 that it is still accounting for 12.3% of the explained variance. This is in contrast to the second component in Table 3 which had

an eigenvalue of 1.52 but only accounted for 6.9% of the variance and was subsequently dropped.

Table 5

Rotated Factor Matrix for Expanded Measure

	<u>Factor 1</u>	<u>Factor 2</u>
Item 1	.85	.17
Item 2	.79	.28
Item 3	.73	.27
Item 4	.78	.27
Item 5	.78	.17
Item 6	.78	.24
Item 7	.75	.28
Item 8	.76	.22
Item 13	.19	.80
Item 14	.16	.83
Item 21	.27	.71
Item 22	.36	.71
Eigenvalue	6.43	1.48
% of Var	53.6%	12.3%

Therefore the present study established an expanded measure of employee attitudes concerning organizational drug testing. This expanded measure consists of two separate scales that tap two areas; perceived fairness and perceived effects on management-labor relations. As can be seen from Table 2 the coefficient alpha reliability estimate for this expanded measure was computed to be .92. Also as can be seen from Table 2 the Coefficient Alpha for the management-labor relations scale is .80.

Relationship between the dependent variables

The two scales forming the expanded measure (i.e. the 8-item perceived fairness scale developed by Stone and Kotch and the 4-item measure of labor-management relations) were found to be significantly correlated ($r = .55$, $p < .001$). Multivariate analyses of variance (MANOVA) were thus used to test the hypotheses. These were followed up by univariate ANOVAS where appropriate.

Results

Manipulation Check

Three items assessed whether the intended manipulations were effective. These items questioned subjects about the specific manipulations (see Appendix E for exact wording). The first item was answered correctly by 81.1% of the respondents while 87.2% and 89.2% answered the second and third items correctly. It was concluded that the subjects had effectively identified the specific manipulations.

MANOVA Results

The results of the MANOVA are presented in Table 6. As can be seen, The MANOVA revealed a significant two-way interaction between Business Purpose and Consequence of detected drug use. Univariate F-tests revealed that the four items forming the management-labor relations scale were responsible for the significant interaction.

Table 6

Summary Table for MANOVA

Source	dfn	dfe	F	Wilk's
BP	2	135	3.24	.954 *
Timing	4	270	1.12	.968
Consqnc	2	135	0.08	.999
EP x Timing	4	270	0.56	.984
BP x Consqnc	2	135	3.33	.953 *
Timing x Consqnc	4	270	1.89	.946
BP x Timing X Consqnc	4	272	0.32	.990

* $p < .05$, BP = business purpose; Consqnc = consequence of detected drug use; Timing = program timing

Because the MANOVA results revealed a significant interaction between Business Purpose and Consequence of detected drug use, a 2-way ANOVA was then performed for this interaction using the four-item management-labor relations scale as the dependent variable. Table 7 presents results for this analysis. As can be seen, there is a significant interaction between business purpose and consequence of detected drug use, $F(1, 136) = 6.25$, $p < .014$. Table 8 presents descriptive statistics for the four cells of the analysis. A Tukey's procedure revealed that the only significant difference between the cell means occurred for the difference between the strong business purpose, rehabilitative condition ($M = 24.82$) and the weak business purpose, rehabilitation condition ($M = 20.85$). An Omega Squared analysis for this ANOVA reveals that the Business Purpose x Consequence interaction is accounting for 3.33% of the total variance.

Table 7

2-Way ANOVA for Business Purpose by Consequence Interaction

Source	SS	DF	MS	F	Sig of F
BP	145.05	1	145.05	6.62	.011
Consqnc	.00	1	.00	.00	.994
BP x Consqnc	136.98	1	136.98	6.25	.014

BP = business purpose; Consqnc = Consequence of detected drug use

Table 8

Reactions to Drug Testing as a Function of Business Purpose and Consequence of Detected Drug Use

Consequences	Business Purpose	
	Weak	Strong
Termination		
M	22.86	22.97
SD	4.61	4.13
n	37	39
Rehabilitation		
M	20.85	24.82
SD	5.37	4.62
n	34	38

It can be seen from the cell means in Table 8 that if employees are terminated for detected drug use that it makes little difference whether there is a strong business purpose for program implementation or not. However, if there is a strong business related purpose for program implementation (i.e. accidents are occurring) to begin with, then it seems that students' attitudes toward the drug testing become significantly more positive if a rehabilitative effort is added to the program. In other words, it seems that students perceived that the drug testing would have the least detrimental effect on management-labor relations when there was a strong business purpose for program implementation coupled with a rehabilitative as opposed to a retaliatory response to those who are detected of having used drugs.

The results of the MANOVA analysis revealed no main effect for consequence of detected drug use as predicted by hypothesis 1 or program timing as predicted by hypothesis 2. Thus, it did not seem to matter to students whether the testing was based on reasonable cause, expected interval, or even random.

Results for the MANOVA also revealed a significant main effect for Business Purpose with the strong business related purpose condition leading to less negative reactions than the weak business purpose condition. Again, univariate F-tests revealed that it is the management-labor relations

scale that is responsible for this main effect. Therefore hypothesis 3 was also only partially supported by the data in that the effect was only significant on one (i.e. management-labor relations) of the two scales.

Of course it must be kept in mind that the lack of significance for program timing and consequence of detected drug use, and likewise the significance of business purpose, must be interpreted in light of the significant interaction that was found between business purpose and consequence for detected drug use. This interaction takes precedents over these main effects.

Supplementary Analyses

Since student demographic characteristics are so easily obtainable from survey-type research it was believed that it would be both valuable and interesting to investigate if there were any significant correlations between these variables and attitudes toward drug testing (see appendix D for exact wording on items). Specific demographic variables investigated included subjects' age, sex, years work experience, prior experience with drug testing, current drug use, and drug testing approval. Table 9 presents descriptive statistics for the student sample on these demographic variables.

Table 9

Descriptive Statistics for Student Sample

	Frequency	Percent
<u>Students Current Drug Use</u>		
Never	115	77.7%
Seldom	24	16.2%
Occasionally	9	6.1%
Frequently	0	0%
<u>Students Previous Experience with Drug Testing</u>		
No previous experience	127	85.8%
Previous experience	21	14.2%
<u>Student Approval of Drug Testing</u>		
Would never favor	14	9.5%
would favor under some circumstances	132	89.2%
No response	2	1.4%

Table 10 shows that there is a significant correlation between drug use and all three dependent measures, $r = -.27$, $p = .001$, $r = -.23$, $p = .001$, and $r = -.29$, $p = .001$. This indicates that those students who currently use drugs perceived the drug testing across all conditions to be less fair than did those students who do not currently use drugs. In addition, those students who currently use drugs also felt that the various drug testing programs would have a more detrimental effect on management-labor relations than those students who do not currently use drugs.

Table 10 also shows that there is a significant correlation between sex and the eight-item Stone and Kotch perceived fairness measure, $r = .24$, $p = .01$, and sex and the 12-item expanded measure, $r = .23$, $p = .01$. It can therefore be seen that females perceived the drug testing to be more fair than did males, but did not differ from males in their perceptions of how the various drug testing programs might effect management-labor relations. This is somewhat surprising since Stone and Kotch (1989) did not find a sex difference previously using the same analysis.

Initially it was believed that this unexpected sex difference in perceived fairness could be partially explained by two findings. First, it was discovered in the present study that the correlation between sex and drug use was $-.14$. While not significant, this correlation indicates that males tended to currently use drugs on a more frequent basis than did females. Second, as previously mentioned, those who currently used drugs perceived the drug testing to be less fair than those who did not currently use drugs. Since males tended to currently use drugs on a more frequent basis than females it was believed that this may partially explain this finding. To test this explanation a correlation was computed between sex and the Stone and Kotch perceived fairness scale partialing out the variance accounted for by drug use. The resulting correlation was computed to be $r = .21$ $p = .01$. Therefore, males higher

rate of drug use did not account for this sex difference as initially believed.

Table 10

Supplementary Analyses

Scale	Sex	Drug use
Stone & Kotch Fairness Scale	.24*	-.27**
Management-Labor Relations Scale	.12	-.23**
Expanded Measure	.23*	-.29**

* p = .01; ** p = .001

Discussion

Results of the present experiment provide strong support that two drug testing policies may help reduce negative employee attitudes and reactions to drug testing. However this was found to be true only if the two policies are implemented together. This is evident in the interaction between business purpose and consequences for detected drug use. Specifically, attitudes were only higher with rehabilitation when there was also a strong business purpose (i.e. increasing accident rate) for implementing the program to begin with. When there was a weak business purpose for implementing the program (i.e. when the program was implemented due to increased societal awareness of drug problems) it did not seem to matter to students whether employees were fired or required to attend a rehabilitation program.

Additionally, this significant interaction was accounted for by the management-labor relations scale and not the Stone and Kotch fairness scale. This indicates that having a strong business purpose and rehabilitative effort is more important for subsequent effects on management-labor relations than on perceived fairness. In other words, having a strong business purpose and rehabilitative focus may not significantly improve employees' perception of how fair the program is, but, on the other hand, these policies are important in terms of not disrupting management-labor relations.

Hypothesis 1 predicted attitudes would be more favorable when detected drug users were required to attend a rehabilitation program as opposed to being terminated. As discussed in the previous paragraph this was only true if there was also a strong business purpose for program implementation.

Hypothesis 2 predicted a main effect for timing of the program. That is, it was expected that testing only for reasonable cause would lead to the most positive attitudes followed by expected interval and then random interval. The MANOVA results did not provide support for this hypothesis for either of the two scales. Therefore, it can be argued that it is advance notice to employees of drug testing that improves attitudes and reduces negative reactions as concluded by Stone and Kotch (1989) and not testing only for

reasonable cause as predicted in the present study.

Managers should therefore heed the advice of Stone and Kotch (1989) that "organizations concerned with reducing negative reactions to drug testing might consider informing employees well in advance of drug testing dates and times" (p. 521).

Hypothesis 3 predicted that employee attitudes toward drug testing would be more favorable when the company had a strong business purpose (i.e. increasing accident rate) as opposed to weak business purpose (i.e. implementing the program due to increased societal awareness of drug problems) for implementing the program. The results of the MANOVA did reveal a significant main effect for business purpose, but only for the management-labor relations scale. However, this main effect must be interpreted with caution since the MANOVA also resulted in a Business Purpose x Consequence interaction as discussed previously.

Perhaps the reason for the insignificant main effects for program timing and consequence of drug detection are due to students being uninformed about the issues. Therefore, future research that may prove useful might include a design in which students or employees are first educated about the issues (such as the issue of whether a positive drug test has anything to do with safety or job performance) and then given the scenarios and attitude measures. Results from such a study may indicate that our efforts should be aimed as much at education as program design as some have

suggested.

Another possible explanation for insignificant main effects involves the use of manipulations in the scenario itself. The scenario in the present study (as discussed under manipulation of program timing) informed all students that employees were given three months advance notice prior to program implementation and that this amount of time would allow them to "cleanse" their systems of any drug residues. Stone and Kotch (1989) manipulated advance notice in their study by informing half of their subjects that advance notice was given and informing the other half that advance notice was not given. It could then be determined if advance notice had an effect on cell means.

The reason all subjects were informed that advance notice was given in the present study was to hold advance notice constant across all conditions. In this way advance notice could not be responsible for differences in cell means. In other words, by holding advance notice constant cell mean differences would be due instead to the different program timing options (reasonable cause, expected interval, or random). Perhaps, however, by informing all subjects that advance notice was given this affected subjects overall impressions of what was and was not fair and what would and would not affect management-labor relations. This explanation would be consistent with the findings of Stone & Kotch (1989) who found that advance notice significantly

reduced negative reactions to drug testing.

The present study replicated the psychometric properties of the instrument developed by Stone and Kotch (1989) to measure employee attitudes concerning organizational drug testing. All eight items were found to have factor weights ($< .78$) on a single component (as compared to ($< .60$) in the original study) and this single component accounted for more than 66.2% of the variance on the items (as compared to 61.4% in the original study). In addition, the reliability of this scale was also found to be impressive, .93 (as compared to .90 in the original study).

However, it must be mentioned that no significant differences were found across the 12 conditions in students' attitudes for the Stone and Kotch (1989) fairness scale. All significant differences were accounted for, instead, by the management-labor relations scale developed in the present study. This may be due, in part, to the sample used. Stone and Kotch (1989) used 73 blue-collar manufacturing employees who had, on the average, 21.79 years of work experience. The present study made use of a sample of 148 college juniors and seniors who had, on the average, 2.51 years of work experience. Perhaps employees' perceptions of what is fair in the workplace evolve and develop as they gain job experience. Thus, what a college senior with 2.51 years of work experience perceives to be fair and what a blue-collar manufacturer worker with 21.79

years of job experience perceives to be fair seem to be somewhat different. Future research should further investigate this age difference so we can better understand how work experience may effect employee attitudes about drug testing.

The present study also aided in producing a richer, more complete instrument to measure employee attitudes concerning organizational drug testing. Four of the 22 experimental items were found to load ($< .57$) on one factor that accounted for 47.5% of the variance of the items. This dimension was interpreted to be measuring management-labor relations. Therefore it is suggested that future research should not consider employee attitudes about organizational drug testing to be a univariate construct. At the very least the perceived fairness dimension established by Stone and Kotch (1989) and the management-labor relations dimension established in the present study should be considered. Future research should further investigate other possible dimensions that may prove to be fruitful for measuring employee attitudes such as grievances, turnover intentions, perceived program effectiveness, etc.

The results from the supplementary analyses indicated that individuals who currently use drugs also perceive drug testing to be less fair and more likely to have detrimental effects on management-labor relations. Future research should further investigate the sex difference in perceived

fairness of drug testing found in the present study. Perhaps this sex difference can be accounted for by women being more conservative politically, or being more concerned about the drug problem in America in general.

One limitation of the present study deserves mention. Students were asked to respond to a simulated drug testing program in a hypothetical organization. Future research that may prove to be especially fruitful might include an experiment in which employees from an actual organization are used. It may prove to be especially beneficial if the particular organization also had an actual drug testing program already in place. Thus, it could be determined if results from this more realistic sample would result in similar findings.

One fruitful avenue for future research would be to further investigate the business purpose for program implementation. It seems to be coming into focus that employees are much more accepting of drug testing when safety is an issue. Future research could specifically investigate employee attitudes about drug testing in jobs that are particularly safety sensitive such as pilot or nuclear power plant operator. In addition, future research should investigate how much advance notice is necessary to have the desired effect on attitudes and reactions as was suggested by Stone and Kotch (1989).

In conclusion, the present research lends strong

support to the importance of considering employee attitudes regarding organizational drug testing. Only when and if these attitudes are considered can drug testing programs be designed so that both the goals of the organization to be drug free and the individuals' rights to privacy and respect be met.

APPENDIX A

Instructions to Subjects

Drug use in the workplace is an issue that has been receiving an increasing amount of attention in recent years. As a result, employee drug testing has emerged as a hotly debated societal and workplace issue. Much has been written about what employers can and cannot legally do in terms of testing their employees. At issue here are individuals' protection from unreasonable searches and seizures as well as issues relating to invasion of privacy. Much has also been written about the effectiveness of drug testing in predicting which job candidates will be likely to make suitable employees.

The purpose of this research is to investigate individual employees' attitudes about various organizational drug testing policies and practices. It is believed that some organizational drug testing policies and practices will be more offensive to employees than will others.

On the following page you will read a description about one possible drug testing program. I would like you to carefully read the description, paying close attention to the details of the drug testing program and complete the questions that follow.

Your participation in this research is strictly voluntary. We want to assure you that your responses will be kept in strict confidence and that there is no way to identify individual people. Remember that there are no "right" or "wrong" answers and you can be certain that others will feel the same way as you. Please be sure to answer all questions as this is of vital importance.

If you have any questions please raise your hand or otherwise contact me, Alan Walker, at (502) 745-2695. We Sincerely appreciate your effort and cooperation. Should you be interested in examining the final results of this research send a postcard to: Alan G. Walker, Department of Psychology, Western Kentucky University, Bowling Green, Ky. 42101.

APPENDIX B

Three forms of the Scenario

Strong Business Related Purpose, Expected
Interval, Termination Scenario

The VKS Company is a medium-sized manufacturing firm located in the Midwest. The firm manufactures color television sets. The assembly process involves the following seven basic tasks: (1) An electronics assembler solders components (resistors, capacitors, and integrated circuits) on the television chassis. They also plug integrated circuits into sockets. These jobs require minimum supervision. (2) A vacuum-evaporation operator produces picture tubes using a heat process to evacuate gases and seal off the neck of the picture tube. (3) A television chassis assembler places the chassis in the cabinet and mounts the picture tube. This job requires careful attention. (4) An inspector checks the quality of the television sets. (5) A packager packages the television sets in shipping cartons. (6) Truck drivers are employed by this firm to deliver packaged sets to distributors. (7) The company also has clerks and an office staff.

The company recently began a drug testing program. This program was initiated due to the personnel manager's concern about a rapid increase in the number of accidents within the company. The accidents were occurring in the picture tube department on the third shift. Interviews with supervisors in this department revealed that they were concerned that the accidents may be due, in part, to employees being under the influence of drugs. The personnel manager therefore implemented the program to reduce the number of accidents to both drug users and other innocent workers and the costs (lost time, medical expenses, etc) associated with them.

Under the new program each employee is required to submit to a urine test once per month, the first morning of work after each payday. Employees were notified three months in advance, which is ample time to "cleanse" their systems of any drug residue, before the program became effective. If the drug test results are positive for any given individual, a second, confirmatory test (with near 100% accuracy) will be conducted. If the second test also is positive the employee will be fired immediately.

Strong Business Purpose, Reasonable Cause, Termination
Scenario

The VKS Company is a medium-sized manufacturing firm located in the Midwest. The firm manufactures color television sets. The assembly process involves the following seven basic tasks: (1) An electronics assembler solders components (resistors, capacitors, and integrated circuits) on the television chassis. They also plug integrated circuits into sockets. These jobs require minimum supervision. (2) A vacuum-evaporation operator produces picture tubes using a heat process to evacuate gases and seal off the neck of the picture tube. (3) A television chassis assembler places the chassis in the cabinet and mounts the picture tube. This job requires careful attention. (4) An inspector checks the quality of the television sets. (5) A packager packages the television sets in shipping cartons. (6) Truck drivers are employed by this firm to deliver packaged sets to distributors. (7) The company also has clerks and an office staff.

The company recently began a drug testing program. This program was initiated due to the personnel manager's concern about a rapid increase in the number of accidents within the company. The accidents were occurring in the picture tube department on the third shift. Interviews with supervisors in this department revealed that they were concerned that the accidents may be due, in part, to employees being under the influence of drugs. The personnel manager therefore implemented the program to reduce the number of accidents to both drug users and other innocent workers and the costs (lost time, medical expenses, etc) associated with them.

Under the new program only those employees whose supervisors have some reason to suspect that they are under the influence of drugs on company time are required to submit to a urine test. All supervisors have undergone a training course to be able to identify the familiar physical and behavioral signs and symptoms of substance abuse - slurred speech, lack of balance, dilated pupils, accidents, unexplained absences, rapid decline in performance, etc. Employees were notified three months in advance, which is ample time to "cleanse" their systems of any drug residue, before the program became effective. If the drug test results are positive for any given individual, a second, confirmatory test (with near 100% accuracy) will be conducted. If the second test also is positive the employee will be fired immediately.

Weak Business Purpose, Random Interval, Rehabilitative
Scenario

The VKS Company is a medium-sized manufacturing firm located in the Midwest. The firm manufactures color television sets. The assembly process involves the following seven basic tasks: (1) An electronics assembler solders components (resistors, capacitors, and integrated circuits) on the television chassis. They also plug integrated circuits into sockets. These jobs require minimum supervision. (2) A vacuum-evaporation operator produces picture tubes using a heat process to evacuate gases and seal off the neck of the picture tube. (3) A television chassis assembler places the chassis in the cabinet and mounts the picture tube. This job requires careful attention. (4) An inspector checks the quality of the television sets. (5) A packager packages the television sets in shipping cartons. (6) Truck drivers are employed by this firm to deliver packaged sets to distributors. (7) The company also has clerks and an office staff.

The company recently began a drug testing program. This program was implemented as a result of recent societal awareness and concern over drug use in the United States. As a result, the company's personnel manager felt a sense of public duty to take action by joining an ever-increasing number of companies who have already implemented such a program.

Under the new program the personnel manager picks drug test dates and individuals to be tested on a random basis. These same individuals are required to submit to a urine test immediately after their names are chosen. Employees were notified three months in advance, which is ample time to "cleanse" their systems of any drug residue, before the program became effective. If the drug test results are positive for any given individual, a second, confirmatory test (with near 100% accuracy) will be conducted. If the second test also is positive the employee will be required to attend a rehabilitation program.

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Appendix C
ATTITUDE QUESTIONNAIRE

Shown below are a number of statements concerning the DRUG TESTING POLICY described in the scenario you just read. Consider each of these statements with respect to this drug testing policy. Please mark the alternative in the space provided that best indicates the degree to which you agree or disagree with the statement. Use the following response possibilities:

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Strongly	Moderately	Slightly	Neither	Slightly	Moderately	Strongly
Disagree	Disagree	Disagree	Disagree	Agree	Agree	Agree
			Nor Agree			

- _____ 1. I feel that the drug testing policy is completely fair.
- _____ 2. I do not think the drug testing policy is reasonable.
- _____ 3. I think drug testing is justified in this situation.
- _____ 4. The company's drug testing policy is unfair.
- _____ 5. I feel that this particular drug testing policy is acceptable.
- _____ 6. The drug testing policy used in this company is an invasion of employee privacy.
- _____ 7. I believe that this drug testing policy violates employee rights.
- _____ 8. In this situation, employee privacy is invaded by the way the company conducts the drug testing.
- _____ 9. This drug testing program is fair in the way employees are selected to be tested.
- _____ 10. I believe those employees who test positive for drug use are treated fairly.
- _____ 11. I believe this company had a fair reason for implementing the drug testing program.
- _____ 12. I believe this drug testing program is just a way of harassing employees.
- _____ 13. I believe this drug testing program is just a way to legitimize supervisor/manager personal biases regarding personnel decisions (like promotions, transfers, layoffs, firings, etc.).
- _____ 14. I believe this drug testing program is just a way to discriminate against minorities in making personnel decisions (like promotions, transfers, layoffs, firings, etc.).

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Strongly	Moderately	Slightly	Neither	Slightly	Moderately	Strongly
Disagree	Disagree	Disagree	Disagree	Agree	Agree	Agree
			Nor Agree			

- _____ 15. It is necessary for the organization to conduct the drug testing described in this situation.
- _____ 16. Legislation should be passed that would make this drug testing program illegal.
- _____ 17. I would object to this drug testing program by filing a formal complaint.
- _____ 18. I would object to this drug testing program by initiating a lawsuit.
- _____ 19. I would quit my job immediately if this drug testing program were implemented at my company.
- _____ 20. I would start to look for another job if this drug testing program were implemented in my company.
- _____ 21. This drug testing program would have a definite effect on my future cooperation with upper-level management.
- _____ 22. I would object to this drug testing program by putting less effort into performing my job.
- _____ 23. I feel comfortable with the drug testing being conducted in this situation.
- _____ 24. Under this drug testing program I would be afraid of myself and/or others testing positive for recreational drug use which has nothing to do with job performance.
- _____ 25. This drug testing program would anger me.
- _____ 26. This drug testing program would humiliate me.
- _____ 27. This drug testing program would result in a safer work environment.
- _____ 28. I believe this drug testing program would result in a less personal relationship between workers and owners/management.
- _____ 29. This drug testing program would lead me to feel that the company does not trust me.
- _____ 30. I believe that this particular drug testing program would be effective in discouraging drug use on the job.

APPENDIX D

Demographic Information

Please check or fill in the following information about yourself.

MALE ☐ FEMALE ☐

My current age is

I have total months of full-time work experience (please include all companies that you have ever worked for)

My current position is Check here if student ☐
If student, are you: Freshmen ☐ Sophomore ☐ Junior ☐ Senior ☐

What is your educational level (check highest level completed):
☐ Some high school ☐ College graduate
☐ high school graduate ☐ Advanced degree
☐ Some College

I currently use illegal drugs (not including alcohol):

- a) never
- b) seldom
- c) occasionally
- d) frequently

Have you ever worked for a company that had a drug testing program?

YES ☐ NO ☐

Does the following statement describe your feelings about drug testing?

I would never be in favor a drug testing program at any organization, for any position, under any circumstances.

YES ☐ NO ☐

What conditions, characteristics, or aspects of a drug testing program would most strongly affect your acceptance or rejection of such a program?

Please feel free to make any additional comments you may have about drug testing. Use the back of this page for additional space.

APPENDIX E

Manipulation Check Items

Please circle the response you feel most accurately answers the following questions about the scenario you just read.

- 1) The personnel director implemented the drug testing program for this organization:
 - a) due to concern about and effort to reduce the increasing accident rate
 - b) as a result of recent societal awareness and concern over drug testing and from a sense of public duty to take action
 - c) because his supervisors pressured him into implementing a program even though he didn't want to
 - d) because he knew he could use the system to get rid of employees he didn't like
 - e) It cannot be determined why he implemented the program
- 2) Under the new drug program for this organization:
 - a) each employee is required to submit to a urine test once per month, the first morning of work after each payday
 - b) only those employees whose trained supervisors have some reason to suspect that they are under the influence of drugs on company time are tested
 - c) the personnel manager picks drug test dates and individuals to be tested on a random basis
 - d) only those employees who have been arrested by the police are tested
 - e) no employees are ever tested
- 3) According to the new drug testing policy for this organization, if the results are positive for any given individual, a second, confirmatory test (with near 100% accuracy) will be conducted. If the second test is also positive the employee:
 - a) will be required to attend a rehabilitation program
 - b) will be given a second chance
 - c) will be terminated immediately
 - d) will be turned over to the police
 - e) will be demoted to a lower level

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